

ABSTRACT

ROTARY SEALING ASSEMBLY

A sealing assembly for a rotatable shaft, comprising means to generate pressure differentials and temperature through pumping action and means to seal fluid, for example of the non-contact helical groove type. Sealing means are positioned outboard of pumping means. Fluid in liquid form is heated and depressurized on passage through pumping means of vortex or viscous shear type, thereby changed from liquid to gas. Gasified fluid is then sealed by sealing means for low leakage operation.